REVIEWS

HAWTREY, CURRENCY AND CREDIT; FISHER, STABILIZING THE DOLLAR[1]

Mr. Hawtrey's book is an important contribution to monetary theory. No small part of its quality lies in its method, for Mr. Hawtrey has undertaken to analyze and explain step by step the actual processes by which credit is expanded and contracted and by which general changes in the price level are effected. While avoiding any parade of erudition he shows knowledge and appreciative understanding of the established body of monetary theory. There is no attempt to emphasize or exploit his own points of difference with generally received doctrines, altho such points of difference are by no means negligible. In short, Mr. Hawtrey's book is painstaking and sincere, as well as competent.

If the book gains neither the readers nor the influence it deserves it will be because Mr. Hawtrey is not a good expositor. His style is unpretentious, straightforward, and generally lucid. But the organization of his argument leaves much to be desired. The reader has to toil through one long and closely-printed paragraph after another, uncertain always whether he is on the threshold of a new turn in the discussion, of a more detailed analysis of a point that has just been presented, of an important qualification of some general and sweeping statement, or of a succinct summary of the stage the argument has reached. Few books with equal claim to be read make equal demands upon the patience of the reader. Mr. Hawtrey owes it to himself as well as to his

[1] Currency and Credit. By R. G. Hawtrey. London, Longmans, Green & Co., 1919.

Stabilizing the Dollar. By Irving Fisher. New York, The Macmillan Co., 1920.

readers to put some sort of articulation into the argument of his next book.

Turning to matters of substance, Mr. Hawtrey breaks with precedent by making gold subordinate to credit. Credit, that is, is held not to be merely a substitute for gold or even a superstructure erected on a gold foundation. In respect of its monetary functions it is assigned a position of priority, while gold is pictured as functioning as an anchor, or better, perhaps, as a kind of gyroscopic stabilizer of the credit system, setting up stresses that force a contraction of the credit system after expansion has gone to a certain point. This view of things helps to give an air of reality to Mr. Hawtrey's account of the processes of the money market, but I do not see that it materially affects his conclusions. They are what they would have been if he had chosen to invert the order of functional, or logical, priority as between gold and credit.

But putting credit into the foreground makes it easier for Mr. Hawtrey to give the emphasis he desires to the concept of the *money of account*. Transferable or assignable credits (Mr. Hawtrey prefers to call them debts) against solvent debtors have purchasing power. Conceivably, perhaps, each credit might be merely a right to receive a certain amount of a particular commodity; different credits might run in terms of different commodities; and exchange, tho easily seen not to be very far removed from barter, might nevertheless be carried on by means of credit instruments. But in fact a unit for the measurements of credit "is indispensable." This is the money of account. Prices, too, are stated in terms of the money of account, for every sale creates a credit, even where the credit is immediately extinguished by a money payment.

With Mr. Hawtrey's nominalistic views, such as that even where there is no money in circulation a money of account, "something wholly conventional and arbitrary," is possible, I cannot agree. Nor do I believe that it can even "occasionally happen" that the unit of the money of account and the unit of the money in circulation do not correspond. For credits are nothing but rights to receive stipulated amounts of the (legal tender) money of circulation, and are of necessity

expressed in the same unit. There may be a difference in name (as between shillings and dollars in the American colonies), but in such cases the unit of the money of account is in fact merely a fraction or a multiple of the unit of the money of circulation.

But even if a money of account, disassociated from a money of circulation, were possible, it is probable that Mr. Hawtrey is right in thinking that it would lack stability, that an expansion or contraction of credit, once initiated, along with the accompanying upward or downward movement of prices, would tend to continue in a cumulative way, without an effective limit. An expansion of credit would create a higher price level and the higher price level would make possible and even necessary a further expansion of credit. Under favorable conditions this process of reciprocal response might perpetuate itself indefinitely.

Under actual conditions, where the money of account is identified with the money of circulation, it is of course the relative inelasticity of the supply of legal tender, and especially of gold, revealing itself in a growing pressure upon bank reserves, that sets a limit to the expansion of credit and the rise of prices. Mr. Hawtrey's account of the ordinary succession of events in a period of expansion is possibly his most substantial achievement. In particular his analysis of the respective parts played by manufacturers, merchants, and consumers is enlightening and for the most part persuasive.

But I am not sure that Mr. Hawtrey is altogether successful in his attempt to derive from his analysis of the expansion of credit a set of new concepts — "consumers' income," "consumers' outlay," "the unspent margin" — and to formulate his general theory in terms of those concepts. His account of the process is lucid and realistic; his attempt to explain the process in abstract and general terms is obscure and seemingly somewhat confused.

His purpose, however, is laudable. He is not satisfied with the conventional formulations of the quantity theory, and the "equation of exchange," however valid, does not seem to him to have much significance. This is partly because Mr.

Hawtrey is less interested in imagined states of monetary equilibrium than in what Professor Irving Fisher would call "transition periods," for these latter seem to Mr. Hawtrey, as to many others, to hold the stage most of the time, and to include the monetary phenomena most worthy of careful study. Moreover, Mr. Hawtrey holds that two of the magnitudes which enter into the equation of exchange — the volume of trade and the rapidity of circulation of money and credit — are not themselves of separate importance.

> In the aggregate of transactions the gross total of business transactions, where goods or securities are bought in order to be sold again, will count for enormously more than the expenditure of the private individual. . . . The turnover of the trader may be many times greater than his income, and his bank balance is far smaller in proportion to his turnover. . . . The traders' turnover counts for far more in the total than its actual share in determining the quantity of purchasing power in circulation would justify, and its amount is affected by capricious and uncertain factors. And the rapidity of circulation of money or credit is not a phenomenon which enters directly into any one's experience. . . . If any circumstances affect the rapidity of circulation of money it can only be indirectly, by affecting balances. (Pp. 47, 48.)

There is much force in this criticism. The equation of exchange does not carry one very far into monetary theory. Perhaps a more significant general statement of the relation between money and the price level is possible. Mr. Hawtrey himself proffers an alternative formulation. If I understand it, and I am not sure that I do (the reader may prefer to consult Mr. Hawtrey's book, at pages 34 and 164), it amounts to nothing more than the statement that what he calls the "unspent margin," i. e., the money in circulation plus the bank credits outstanding, is measured as a sum or *quantity* in the units in which prices are stated. Any change in the magnitude of the unit will be accompanied by an inversely proportional change both in the number or "quantity" of units and in prices.

Just what does this mean and how significant is it ? Make the dime instead of the dollar the monetary unit, and prices and the number of monetary units will be increased tenfold.

Is this a change in the "quantity" of money? Not everyone will agree that cutting down the weight of the monetary unit from 25.8 grains to 2.58 grains would be properly interpreted as a tenfold increase in the quantity of money. Quantity depends, some will say, upon the magnitude of the unit as well as upon the number of units. But Mr. Hawtrey's quantity theory is not wholly disposed of by such considerations. If, beside credit instruments, there were no money save Mr. Hawtrey's hypothetical money of account, the monetary unit would have no magnitude except a value magnitude, expressed by its relations to commodities and services in general, that is (inversely) by prices. The quantity of money would be merely the sum of the money units in the credit instruments outstanding. This could be interpreted only as (1) an abstract number or (2) a sum of purchasing power. Purchasing power being inversely proportional to prices, the quantity of money would be more or less according as prices were higher or lower. The quantity theory, in fact, would be wholly contained within the phrase "quantity of money." In these respects an inconvertible paper currency, wholly divorced from a commodity standard of value, does not differ from a money of account. Its quantity *is* its value, or else is a mere number. Most of the expounders of the quantity theory, I suppose, would be content to define quantity in this case as mere number. If so, must not the change from dollars to dimes be held to be an increase in the quantity of money?

But the significant problem, as Mr. Hawtrey fully realizes, is of the effect of an initial change in the number of monetary units rather than in the magnitude of the monetary unit. For this problem, he confesses, his formulation of the quantity theory is inadequate. It is here that he has recourse to the acute analysis and the awkward exposition to which I have referred above. In large measure this part of the discussion is a development and a more rigorous treatment of points made in Mr. Hawtrey's earlier book on *Good and Bad Trade*. (For the general reader the earlier book may be more safely recommended than the present work.) It is impossible here to follow into all of the intricacies of Mr. Hawtrey's analysis. Its general outlines only can be indicated.

An increase in bank credit in the form of advances to manufacturers and merchants is paid out in the form of the expenses (and profits) of production and distribution and becomes "consumers' income." If purchases ("consumers' outlay") just keep pace with the increase in consumers' income they will enable the dealers to take up their obligations as they mature, altho they will have to give new orders, leading to fresh creations of bank credit, to replenish their depleted stocks. If outlay lags behind income, consumers' balances of money and credit (the "unspent margin") will increase. The more rapidly the unspent margin increases the *slower* will be the advance of prices. A rise of prices results from the use of purchasing power, not from its accumulation.

During a period of depression a considerable acceleration of the rate at which credit is created is possible without an accompanying rise in prices. But sooner or later the increase of credit, i. e., of purchasing power, presses against the productive resources of the country, and prices rise. The increasing price level on the one hand, and the supply and demand of credit on the other, react on each other with cumulative effect. Under ordinary conditions there is no halting the process until bank reserves become inadequate and discount rates have to be raised. Even then some further inflation is latent in the situation, for producers have unfilled orders on their books. And bank reserves are likely to be further depleted: wages have very likely not reached their peak, and for this and other reasons less money has been drawn into hand-to-hand circulation than the high price level would justify.

With some relatively unimportant qualifications I can accept this as an outline of the general mechanism of a period of credit expansion. I cannot see, however, that the "unspent margin" is properly a part of the explanation, except so far as it enables Mr. Hawtrey to give a paradoxical twist to the quantity theory. I even doubt the truth of the paradox. The more rapidly consumers spend their incomes, the more rapidly, in general, will fresh orders by dealers lead to the creation of new credit, and the more rapidly will "consumers' income" be augmented. The unspent margin (a misleading

phrase) is likely to be replenished in a period of rising prices more rapidly than it is depleted. On these and on other matters Mr. Hawtrey might either have brought himself to revise his own opinions or have removed the doubts of his readers if he had tested and controlled his conclusions by the use of statistics.

In some of its details Mr. Hawtrey's account is, as might be expected, a more accurate interpretation of English than of American conditions. He is preoccupied with the monetary side of manufacturing and trading occupations and gives little attention to those variations in farmers' incomes which play so important a part in the fluctuations of the American money market. Again, his general statement that credit expands and prices advance until an adverse movement of the foreign exchanges gives the first signal of danger to bank reserves does not hold, unless many exceptions are made, for pre-war conditions in the United States. His discussion of the process by which credit is contracted, altho not neglecting the problems of countries which do not "finance their own exports or imports," is primarily concerned with the pre-war mechanism of the London money market.

I have selected for comment those portions of Mr. Hawtrey's book which have the best claim to be called contributions to monetary theory and to which he himself attaches most importance. In his accounts of international currency movements, of coinage problems, of the relation of war finance to inflation, and of the general theory of banking operations, American economists will find fresh points of view, but little of large significance that is wholly new. There will be dissent, no doubt, at minor points, such, for example, as Mr. Hawtrey's thesis that the adequacy of bank reserves is a matter of their absolute amount rather than of their ratio to bank liabilities. There are some remarkably fresh, interesting, and well-informed chapters on such well-worn topics as the assignats, the Bank restriction of 1797, and the history of the gold standard.

On the largest monetary problems of the day — deflation and the future of the gold standard — Mr. Hawtrey, like any

writer who knows the magnitude of the unknown factors in the situation, is inconclusive. Two observations, however, are worth quoting: "Deflation and capital restoration, notwithstanding that taxation and other severe financial methods favor both, must be regarded as in some degree rivals. Purchasing power which is applied to the one is diverted from the other. The problems of the finance of recuperation are largely the consequence of this rivalry." And again: "During the war, wages have everywhere been increased in a very high proportion. It seems not unlikely that the difficulty of reducing them again will be the determining factor in the settlement of the future monetary units."

Professor Fisher's new book does not call, as a whole, for extended comment. Economists are familiar with Professor Fisher's plan for varying the amount of gold in the monetary unit in accordance with the showings of an officially-kept index number of prices. It has been critically discussed in this and other journals. Undoubtedly it has won for itself an increasing measure of support. Possibly Professor Fisher does not go too far when he says in his preface, "By this time [1918] academic economists had been largely won over to the idea, it having run the gantlet of their criticism for several years." My own impression, however, is rather that the general attitude of competent academic opinion could be more accurately described as open-minded, receptive, in some measure acquiescent, but nevertheless doubtful and even skeptical with respect to the practical feasibility of the plan.

This noncommittal attitude cannot fairly be explained as an instance of the hesitancy sometimes supposed to characterize the academic scholar. There are many who would be glad to see the experiment made who remain doubtful as to its outcome. The fact is that the repercussions of the stabilizing operations upon banking, upon foreign trade, and upon business enterprise and industrial progress in general, are exceedingly complex matters. They need more accurate and more thorogoing analysis than they have yet received. Professor Fisher's unusual power of broad and yet precise generalization leads him sometimes to oversimplify his problems.

The body of the book is made up of propaganda addressed to the general reader. There is an elementary explanation of the scheme and of the evils which it is designed to cure. Pains are taken to anticipate different sorts of misunderstandings and adverse arguments. All this, as one expects of Professor Fisher, is carefully arranged and lucidly presented. He has done well, for example, to plot all of his diagrams on a logarithmic vertical scale. The point of interest, of course, is the relative rather than the absolute change in the price level.

Economists will have more interest in the several appendices in which Professor Fisher develops the technical details of his plan. From among a number of specific proposals that invite comment I select two which seem to me to have an important relation to the general principles upon which the whole scheme rests. These topics are the management of the gold reserves and the structure of the index number.

The problem of the maintenance of adequate gold reserves back of the "gold bullion dollar certificates" has many perplexing features. If prices tend to increase, the outstanding certificates will, under the stabilization plan, be redeemable in increasing amounts of gold. The reserves might easily become less than a 100 per cent cover for the certificates. When prices tendencies are downward surplus reserves will be accumulated. If the reserves were allowed to fluctuate freely in this manner there is a possibility that in the long run surpluses might balance deficits, but there is also a possibility that the reserves might be exhausted, or reduced to a point where confidence in them would be lost. But, as Professor Fisher suggests, the reserves might be kept at 100 per cent by withdrawing certificates from circulation or by issuing additional certificates at the expense or to the profit of the government. This contraction or expansion of the currency, it is clear, would augment the effect on prices of the last previous correction in the mint price of gold.

The plan Professor Fisher prefers, however, is to fix the legal reserve at 50 per cent of the certificates outstanding (in which case they should be called notes) and to regard gold accumulations in excess of the amount so determined as

"surplus." The surplus, he suggests, might be used to purchase government bonds, which could be sold and the certificates thus obtained retired, if at any time the reserve should become impaired. The initial operation of exchanging gold for bonds would in some measure defeat its own purpose, for it would cheapen gold, raise prices, decrease the redemption price of gold at the mint, bring the reserve down below the 50 per cent line, and necessitate the sale of bonds. I do not agree with Professor Fisher that the effects of these gold sales upon the price level might be offset by the diminution of the supply of bonds available for collateral at the banks. The problem is too complicated to be discussed in a review, but it obviously hinges upon the degree of elasticity of the market for gold, as well as upon the extent to which, at the time, government bonds are themselves carried by bank loans.

"This system," says Professor Fisher, "would recognize the needless waste involved in a 100 per cent, or other high reserve." I fear that Professor Fisher is here giving currency to a fallacy which one encounters only too frequently, especially in discussions of the advantages of the gold-exchange standard. In the long run there is no real economy in reducing gold reserves, except as the industrial demands for gold are more easily met and, at the same time, gold mining repressed. Economies of this sort are not what Professor Fisher has in mind, for, as we have just seen, he does not believe that a reduction of the gold reserve need be accompanied by a fall in the value of gold.

One of the objections made to Professor Fisher's plan, in its original form, was that the ordinary index number of the general price level covers a multitude of commodities whose price movements are relatively sluggish. Just as changes in retail prices usually lag behind changes in wholesale prices, so wholesale prices themselves are of different degrees of responsiveness to changing monetary conditions. There is a chance, therefore, that the movements of the index number, held back by these relatively sluggish and unresponsive commodities, might indicate that the mint price of gold should, for example, be decreased, even tho earlier corrections

had already initiated a downward movement in prices, undetected as yet by the index number. It was accordingly suggested that a selective rather than a general index number should be used.

Professor Fisher has now constructed an index number based on 155 series of price quotations, covering 75 especially sensitive commodities. It shows as between 1913 and July, 1919, a rise of 130 per cent as against 116 per cent shown by the Bureau of Labor Statistics index number of wholesale prices, and this comparison falls short of revealing its superior sensitiveness. It lags behind changes in the amount of money in circulation, Professor Fisher thinks, by about a month.

The use of a special index number of this type narrows the commodity basis with reference to which changes in the value of money are to be determined. It will not meet with the approval of those critics of Professor Fisher's plan who believe it should not be based upon wholesale prices alone, but that retail prices, rents, wages, and possibly other items should be taken into account. The index number, in the view of such critics, should be one on which a just standard of deferred payments might be based. The old controversies about "commodity standards," "utility standards," and "labor standards" have seemed likely to be revived in some of their discussions.

These critics, of course, miss the whole point of Professor Fisher's proposals. His index number is not and should not be the type of index number which would indicate the degree to which debts might justly be scaled up or down. It is merely part of a mechanism which, if successful, would not so much afford in itself a just standard of deferred payments as do away with that problem altogether. For this purpose there can be small doubt that a selective index number, based on the wholesale prices of commodities that are particularly responsive to monetary influences, is best.

The most significant thing about Professor Fisher's index number is that it is made up very largely of important imported commodities, together with commodities which figure largely in our exports and goods into which imported or ex-

portable commodities enter as raw materials. This fact is closely connected with a point which, more than anything else, has made me doubtful of the practicability of a purely national undertaking to stabilize the dollar.

Assume, for example, that new supplies of gold are pressing prices upward. Domestic prices are held down by decreasing the mint price of gold. Not all prices will be simultaneously affected by this operation. For some commodities the diminution in price or the retardation of the upward movement will come slowly and, to producers and consumers alike, imperceptibly. But goods for which the market is international will be affected at once. Their domestic prices will drop relatively to their prices in foreign markets by an amount which will just correspond to the fall in the price of foreign exchange, which in turn will correspond to the decrease in the mint price of gold. Where the foreign market is of dominating importance the drop in the domestic price of imported or exportable goods may in itself be equal to the amount of "correction" applied to the dollar, and this is likely to be the initial effect in most cases.

During a year in which the mint price of gold is reduced at each of a number of successive periods, the decline in the prices of the commodities which have an international market, relative to the more slowly-moving prices of other goods, may be considerable. Importers will gain as exporters lose; and, of course, when the general tendency of prices is in the other direction their relative positions will be reversed. But I am very doubtful whether a decline of even a few cents a pound in the price of cotton, directly attributable to the action of the government, in a period when many commodities may be increasing in price, would be viewed with equanimity by cotton growers. I should expect that such things as this would make the plan politically unpopular, and hence impracticable.

At any rate I do not believe that Professor Fisher will gain much support among economists for his proposal that the present high level of prices should be stabilized. That high level is supported by credit expansion at home, but also in part by credit expansion in Europe. A general collapse of the

European credit structure, with enforced liquidation, might easily drain so much gold from us that our price level could be maintained only by transforming our "bullion certificates" into inconvertible notes. I am not sure that Professor Fisher would object to this. In this book he puts more emphasis than before upon the control of prices by the control of the number of certificates in circulation and less upon the direct effect of changing the amount of gold in the monetary unit.

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USHER, INTRODUCTION TO THE INDUSTRIAL HISTORY OF ENGLAND [1]

IT is a trite saying that the Holy Roman Empire was not holy, not Roman, and not an empire. And so with the scholarly book under review: it is too advanced to be called an Introduction; it is not strictly confined to industrial history; and it is not exclusively concerned with England. Two long chapters deal with manufacture outside of England, in the ancient world and in medieval France. In a book on the general history of industry, such studies would be necessary; but since there is no proved connection between the industry of the ancient period and of medieval France on the one hand and English industry on the other, some may question whether the author is justified in going so far afield. The subject of English history is introduced, not by a chapter on Anglo-Saxon industry but by one on " The Population of England, 1086–1700." Then follows a chapter on the " Village and Manor," satisfactory in itself but not made contributory to the general theme of industrial history. Thirty

[1] An Introduction to the Industrial History of England. By A. P. Usher, Assistant Professor of Economics, Cornell University. Houghton Mifflin Co., 1920. Pp. xix, 529. $2.50.